ENVIRONMENTAL CHEMISTS

Date of Report: 04/27/99 Date Received: 04/15/99

Project: Metro Self Monitor, PO# M61818

Date Samples Extracted: 04/23/99 Date Extracts Analyzed: 04/23/99

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A Results Reported as mg/L (ppm)

 Sample ID
 Chromium
 Copper
 Nickel
 Zinc

 M61818
 0.42
 0.33
 0.21
 <0.05</td>

 Method Blank
 <0.05</td>
 <0.05</td>
 <0.05</td>
 <0.05</td>

ENVIRONMENTAL CHEMISTS

Date of Report: 04/27/99 Date Received: 04/15/99

Project: Metro Self Monitor, PO# M61818

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 904093-01 (Duplicate)

				Relative		
	Reporting	Sample	Duplicate	e Percent	Acceptance	
Analyte	Units	Result	Result	Difference	Criteria	
Chromium	mg/L (ppm)	0.41	0.41	0	0-20	
Copper	mg/L (ppm)	0.43	0.41	5	0-20	
Nickel	mg/L (ppm)	0.39	0.40	3	0-20	
Zinc	mg/L (ppm)	0.07	0.07	0	0-20	

Laboratory Code: 904093-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recovery	% Recovery	Acceptance	
Analyte	Units	Level	Result	MS	MSD	Criteria	RPD
Chromium	mg/L (ppm)	5	0.41	87	92	80-120	6
Copper	mg/L (ppm)	5	0.43	87	91	80-120	4
Nickel	mg/L (ppm)	10	0.39	85	88	80-120	3
Zinc	mg/L (ppm)	5	0.07	86	88	80-120	2

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recovery	% Recove	ry Acceptance	e in the first of	
Analyte	Units	Level	LCS	LCSD	Criteria	RPD	
Chromium	mg/L (ppm)	5	105	96	80-120	9	
Copper	mg/L (ppm)	5	106	90	80-120	16	
Nickel	mg/L (ppm)	10	106	99	80-120	7	
Zinc	mg/L (ppm)	5	108	103	80-120	5	

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282 •

904070 mm 4 1599 CI

SAMPLE CHAIN OF CUSTODY

•								
Send Report To:	Pani Cor	X2V	1 and			General		
Address 628	Huland	2 30	- CORCA		Contact	verda	102	304920-1
City, State, Zip Sept	He	us	98134	······································				
Phone # 206-382-	8779		FAX #_	206-30	82-4509	Date	9-75-0	25
SITE NO.			PRO	IECT NAME	3	PURCHA	SE ORDE	R#
72:38			nedro Sel	<i>C</i> '	. 1			
SAMPLERS (signature)			reoras sec	+ 1/20	ritor	M 6/8		
Comment of the second of the s						PROJECT		ON
REMARKS				· · · · · · · · · · · · · · · · · · ·		3200 68	- 4	ee S.
						SAMPLE DISPOS		
vi vi vi						Dispose aft		/S
						Return San		1
	Date/	rime	Time of	# of	<u>_ </u>	Call for Ins		
Sample #	Samp		Type of Sample	# or Jars	Lab Sample #		Analyses Requested	
m61818	8/15/59	12:70	1420	/	01	000		ريح'
						1	<i>[]</i>	
				1.	**			
				 				
				 				
	 		~		:		·	
					•			
			•					
		1					···	
					· · · · · · · · · · · · · · · · · · ·			

						<u> </u>		
SIGNATURE		DDI	NO NAME	<u> </u>				
Relinguished by	·		NT NAME	7	COMPANY	. D	ate	Time
X	70	ene la	Thomps	>	DCW "	9/3	= /53	1:26 pm
Received by Laing for	2				-B1 1	w.	5-95	(1)
Relinquished by:						- 7/2	<u>5 /)</u> '	120
Received by:		•	•	_			· .	

FORMS/COC

04/02/99

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

April 27, 1999

DUPLICATE COPY

INVOICE #99ACU0427-2

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M61818: Results of testing requested by Gerry Thompson for material submitted on April 15, 1999.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$80 per sample \$80.00

Amount Due \$80.00

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

April 27, 1999

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on April 15, 1999 from your Metro Self Monitor, PO# M61818 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU0427R.DOC